



Enabling Grids for E-sciencE

quattorStatus of migration to SourceForge

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www.eu-egee.org





ecee Enabling Grids for

Introduction

- All quattor collaborative resources historically located at CERN:
 - Mailing lists, CVS repository, Savannah bug-tracker
- Decided to move source repository to SourceForge
 - Removes need for CERN account
 - Makes it clear that quattor is an open-source community
 - Not dependent on one or two admins
 - Test migration of source code starting with core NCM components
- SF project "quattor" created during last workshop
 - Wiki set up: now primary entry point for quattor (quattor.org)
 - Idea is that anyone in community can add content (e.g. case studies)
- If you want to contribute please send me your SF username (create an account if you don't have one)





Status of code migration

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- Set of core modules decided on
 - aii,ccm,documentation,ncm-cdispd,ncm-components/core,ncm-components/lcg-2,ncm-components/glite, ncm-components/lib,ncm-ncd,ncm-query, ncmtemplate,pan-templates,perl-CAF,perl-LC,quattor-build-tools,rpmt-py,spma,util
- Method of exporting CERN CVS tested
 - Using cvs2svn: allows full history to be transferred to Subversion
- Prototype of build tools with support for SVN
- Sticking point is integration of build tools
 - Previously referenced with relative include (../../quattor-build-tools)
 - In SVN, code in branches and tags is a different distance from root
 - Need different solution (see later)



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Structure in Subversion

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- See http://quattor.svn.sourceforge.net/viewvc/quattor/ for current
- Principle: trunk checkout should be same as current CVS
 - Should be possible to build any product directly
- SVN handles tags (and branches) differently to CVS
 - Appear as separate directories in the tree
 - e.g. tags/aii/2.3.3
 - Local tag hierarchy appears within products
 - e.g. tags/ncm-components/core/ncm-accounts/3.0.17
 - "Global" or "release" tags currently also appear within products
 - e.g. tags/ncm-components/core/ncm-accounts/quattor_1_2
 - Should a release tag contain a tree with tagged products instead?
 - e.g. tags/release/quattor/1.2/ncm-components/core/ncm-accounts
 - Complete tagged release can then be checked out easily
- Management of tags should be encapsulated in build tools anyway





quattor build tools (1)

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- Discussion on mailing list Jul-Aug 2008 decided on including quattor build tools in every version of every product's directory
 - Use Subversion's externals feature to pull them in automatically
 - Allows any tag of any product to be checked out and built
 - Problem is speed: now takes ~17 minutes to update tree!
- Alternative proposal (Luis) to build tag versions from within trunk
 - Add make tag=<tag-name> option to build tools
 - svn switch the current directory to the relevant tag
 - Build component from tagged version
 - svn switch back to trunk version
 - Pros
 - Build tools not checked out multiple times
 - No impact on frequent use case of building from trunk
 - Cons
 - Requires more work by build tools
 - Contents of tags area don't build directly
 - Could be a little confusing





quattor build tools (2)

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- Quicker solution that doesn't require build tools changed
 - Instead of one copy per version per product just put them where needed

trunk/ (for aii, ccm, etc.)

tags/ncm-components (for tagged components)

tags/aii (for aii sub-components)

possibly a few more ...

- Pros
 - No extra work in build tools
 - Build tools only checked out a small number of times
 - No impact on frequent use case of building from trunk
 - Can build directly from within tags
- Cons
 - Could be a little confusing having build tools spread around
- Could do this first, then add previous suggestion



Action plan

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- 1. Decide (now) on structure of release tags (if local tags OK?)
- 2. Decide (now) on preferred build tools solution
- 3. MEP and SC to implement agreed scheme on current SF
- 4. Community to test this
- 5. Set deadline (before end of year) for making CERN CVS read-only
- 6. Make sure all users (especially CERN) are aware of changeover
- 7. Re-export contents of CERN CVS to SF and correct structure
- 8. Declare SF code repository open for business!
- Track progress at <u>http://quattor.wiki.sourceforge.net/MigrationToSf</u>
- Talk about issue trackers, mailing lists, etc., at next workshop?